

Art Unit: 2655

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of controlling high-speed reading in a text-to-speech conversion system including a text analysis module for generating a phoneme and prosody character string from an input text; a prosody generation module for generating a synthesis parameter of at least a voice segment, a phoneme duration, and a fundamental frequency for said phoneme and prosody character string; a voice segment dictionary in which voice segments as a source of voice are registered; and a speech generation module for generating a synthetic waveform by waveform superimposition by referring to said voice segment dictionary,

said method comprising the step of providing said prosody generation module with a phoneme duration determination unit that includes both a duration rule table containing empirically found phoneme durations and a duration prediction table containing phoneme durations predicted by statistical analysis and determines a phoneme duration by using, when a user-designated utterance speed exceeds a threshold contained in the duration rule table, said duration rule table and, when said ~~threshold is~~ utterance speed does not exceeded the threshold, said duration prediction table.

2. (original) The method according to claim 1, wherein said threshold is a predetermined maximum utterance speed.

3. (currently amended) A method of controlling high-speed reading in a text-to-speech conversion system including a text

Art Unit: 2655

analysis module for generating a phoneme and prosody character string from an input text; a prosody generation module for generating a synthesis parameter of at least a voice segment, a phoneme duration, and a fundamental frequency for the phoneme and prosody character string; a voice segment dictionary in which voice segments as a source of voice are registered; and a speech generation module for generating a synthetic waveform by waveform superimposition while referring to said voice segment dictionary,

said method comprising the step of providing said prosody generation module with a pitch contour determination unit that has both an empirically found rule table and a prediction table predicted by statistical analysis and determines a pitch contour by determining both accent and phrase components with, when a user-designated utterance speed exceeds a threshold contained in the rule table, said ~~duration~~ rule table and, when said ~~threshold is~~ utterance speed does not exceeded the threshold, said ~~duration~~ prediction table.

4. (original) The method according to claim 3, wherein said threshold is a predetermined maximum utterance speed.

5. (original) A method of controlling high-speed reading in a text-to-speech conversion system including a text analysis module for generating a phoneme and prosody character string from an input text; a prosody generation module for generating a synthesis parameter of at least a voice segment, a phoneme duration, and a fundamental frequency for the phoneme and prosody character string; a voice segment dictionary in which voice segments as a source of voice are registered; and a speech generation module for generating a synthetic waveform by waveform superimposition by referring to said voice segment dictionary,

Art Unit: 2655

said method comprising the step of providing said prosody generation module with a sound quality coefficient determination unit that has a sound quality conversion coefficient table for changing said voice segment to switch sound quality and selects from said sound quality conversion coefficient table such a coefficient that sound quality does not change when a user-designated utterance speed exceeds a threshold.

6. (original) The method according to claim 5, wherein said threshold is a predetermined maximum utterance speed.

7. (currently amended) A method of controlling high-speed reading in a text-to-speech conversion system including a text analysis module for generating a phoneme and prosody character string from an input text; a prosody generation module for generating a synthesis parameter of at least a voice segment, phoneme duration, and fundamental frequency for the phoneme and prosody character string; a voice segment dictionary in which voice segments as a source of voice are registered; and a speech generation module for generating a synthetic waveform by waveform superimposition by referring to said voice segment dictionary,

said method comprising the step of providing said prosody generation module with both a pitch contour correction unit for outputting a pitch contour corrected according to an intonation level designated by the user and a switch for determining whether a base pitch is added to said pitch contour corrected according to said user-designated utterance speed, said switch being controlled not to change the base pitch when the utterance speed exceeds a threshold.

Art Unit: 2655

8. (original) The method according to claim 7, wherein said threshold is a predetermined maximum utterance speed.

9. (original) The method according to claim 7, wherein said pitch contour correction unit performs a pitch contour generation process that includes a phrase component calculation process in which all phrases of an input sentence are processed by calculating a phrase component by statistical analysis according to said user-designated utterance speed or making said phrase component zero and a process in which all words in said input sentence are processed by calculating an accent component by statistical analysis according to said user-designated utterance speed and either correcting said accent component according to said user designated intonation level or making said accent component zero.

10. (original) A method of controlling high-speed reading in a text-to-speech conversion system including a text analysis module for generating a phoneme and prosody character string from an input text; a prosody generation module for generating a synthesis parameter of at least a voice segment, a phoneme duration, and a fundamental frequency for said phoneme and prosody character string; a voice segment dictionary in which voice segments as a source of voice are registered; and a speech generation module for generating a synthetic waveform by waveform superimposition while referring to said voice segment dictionary,

said method comprising the step of providing said speech generation module with signal sound generation means for inserting a signal sound between sentences to indicate an end of a sentence when a user-designated utterance speed exceeds a threshold.

Art Unit: 2655

11. (original) The method according to claim 10, wherein said threshold is a predetermined maximum utterance speed.

12. (original) A method of controlling high-speed reading in a text-to-speech conversion system including a text analysis module for generating a phoneme and prosody character string from an input text; a prosody generation module for generating a synthesis parameter of at least a voice segment, a phoneme duration, and a fundamental frequency for the phoneme and prosody character string; a voice segment dictionary in which voice segments as a source of voice are registered; and a speech generation module for generating a synthetic waveform by waveform superimposition by referring to said voice segment dictionary,

said method comprising the step of providing said prosody generation module with a phoneme duration determination unit for performing a process in which when a user-designated utterance speed exceeds a threshold, an utterance speed of at least a leading word in a sentence is returned to a normal utterance speed.

13. (original) The method according to claim 12, wherein said threshold is a predetermined maximum utterance speed.

14. (original) The method according to claim 12, wherein said phoneme duration determination unit performs a process in which when a word under process is a leading word in a sentence and said user-designated utterance speed exceeds said threshold, a phoneme duration is not corrected and, when said word under process is not a leading word of a sentence or said user-designated utterance speed does not exceed said threshold, a first process by which a phoneme duration correction coefficient is changed according to said user-designated utterance speed and a second process in which

Art Unit: 2655

all syllables of said word are processed by correcting a length of a vowel or vowels of said word, and carrying out said first and second processes for all words contained in the sentence.